## Data Engineering Program Support for HLA

**Briefing for AMG-18** 

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#### **Topics to be Covered**

- Common Semantics and Syntax (CSS) Development Update
  - Current (Phase 1) Analyses
  - Future (Phase 2) Analyses
- DIF Development Update
  - OMT DIF
  - FED DIF
- HLA Object Model Library (OML)
  - Capabilities and development plan
  - Demonstration

### **CSS Development - Phase 1**

- Real-time Platform-Level Reference (RPR) FOM
  - Mappings of DoD Data Standards to RPR FOM, Version 0.1.4 available at http://stds.sc.ist.ucf.edu/docref/rpr-fom/
  - Updates to RPR FOM, Version 0.1.5 underway
  - Comparison with CMMS Verb Dictionary contents underway
- HLA C2 Experiment FOM
  - Currently mapping DoD Data Standards to Joint Training Federation protofederation
  - Will be participating in the building of the C2 Experiment FOM
- Engineering Federation FOM
  - Preliminary analysis of DoD Data Standards to Engineering Protofederation FOM complete
  - Updating analysis to Engineering Federation FOM

### **CSS Development - Phase 2**

- Aggregate-Level Simulations
  - Initial contact made with Anita Zabek (MITRE)
- Analysis Simulations
  - Initial contact made with LTC Terry Prosser (PA&E)
- T&E Range Simulations
  - Initial contact made with George Rumford

#### **Data Interchange Formats**

- Object Model Template (OMT) DIF
  - An interchange specification for FOMs and SOMs
  - Used for FOM/SOM interchange
    - among OMDTs
    - between an OMDT and the OML
  - Updated to comply with OMT Version 1.1
- Federation Execution Data (FED) DIF
  - An interchange specification for RTI Initialization Data (RID) governed by the IF Spec
  - Will be supported by the OMDTs
  - Can be used by initialization tools, stealths, loggers, etc.
  - Analysis of IF Spec FED requirements and F.0 FED files underway
  - Information on STOW FED files requested

#### **HLA OML Support to the FEDEP**

- Make FOMs and SOMs accessible to anyone
  - FOMs and SOMs for specific applications
  - Reference FOMs
- Support the reuse FOMs and SOMs
- Provide pieces and parts for the creation of new FOMs and SOMs
- Provide a basis for the comparison of semantic differences between/among multiple FOMs and SOMs

#### **HLA OML Functional Capabilities**

- Searching multiple across FOMs/SOMs
  - for classes, attributes, interactions, etc.
- Registration of OM Library users
  - Required to check in models to the OM Library
- Storage & retrieval of FOMs/SOMs in OMT DIF
- Automated FOM/SOM interchange with OMDTs
- Online documentation
  - OM Library Usage Procedures
  - OMT & OM Library Structure References

#### **HLA OM Library Architecture**

- WWW-based application
  - Frames based interface (Internet Explorer 3, Netscape 3 compatible)
  - Non-frames based interface (Internet Explorer 2, Netscape 2 compatible)
- Centralized database (currently MS Access)
- Exports/imports OMT files to/from AEgis and TASC OMDTs
- Direct links via AEgis and TASC OMDTs

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### **Using the OM Library**

- URL http://www.omlibrary.epgc4i.com (208.145.129.5)
- FOM/SOM check-out
  - Download OMT file and save to local file system
- FOM/SOM check-in (2 steps)
  - Upload OMT file to FTP server (anonymous login)
  - Check FOM/SOM into the library
- Automated interface via AEgis and TASC OMDTs

# HLA Object Model Library Demonstration

### **Project Plan**

- Alpha release 25 March 97
  - uses OMT DIF 1.0
- Pre-beta release 9 April 97
  - will use OMT DIF 1.1
- Beta-release ~ 15 May 97
  - incorporate alpha tester feedback
- Future releases
  - Security for on-line registration
  - Capabilities to update and delete FOMs and SOMs
  - Browse capabilities
  - Updates for OMT changes
  - Server-based Oracle RDBMS

#### **Questions**

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